

How to change front brake pads on **Mini R50**, **R53** – replacement guide





#### **VIDEO TUTORIAL**



## (i) Important!

This replacement procedure can be used for:

MINI Hatchback (R50, R53) 1.6 One, MINI Hatchback (R50, R53) 1.6 Cooper, MINI Hatchback (R50, R53) 1.6 Cooper S, MINI Hatchback (R50, R53) 1.4 D One, MINI Hatchback (R50, R53) 1.6 Works, MINI Convertible (R52) 1.6 One, MINI Convertible (R52) 1.6 Cooper, MINI Convertible (R52) 1.6 Cooper S, MINI Convertible (R52) 1.6 John Cooper Works, MINI Hatchback (R50, R53) 1.4 One D, MINI Hatchback (R50, R53) 1.6 S Works, MINI Hatchback (R50, R53) One

The steps may slightly vary depending on the car design.

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## REPLACEMENT: BRAKE PADS – MINI R50, R53. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Anti-squeal paste
- Copper grease
- HEX bit No.H7.
- Wheel impact socket #17

- Flat screwdriver
- Brake caliper wind back tool
- Ratchet wrench
- Torque wrench
- Crow bar
- Wheel chock

**BUY TOOLS** 

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#### Replacement: brake pads - Mini R50, R53. Professionals recommend:

- Perform the replacement of brake pads in complete set for each axis. This
  provides effective braking.
- The replacement procedure is identical for all brake pads on the same axle.
- Please note: all work on the car Mini R50, R53 should be done with the engine switched off.

#### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

Open the bonnet. Unscrew the brake fluid reservoir cap.



Secure the wheels with chocks.

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Loosen the wheel mounting bolts. Use wheel impact socket #17.



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Raise the front of the car and secure on supports.



5 Unscrew the wheel bolts.



Replacement: brake pads – Mini R50, R53. AUTODOC experts recommend:

• To avoid injury, hold up the wheel when unscrewing the bolts.

6 Remove the wheel.



Spread the brake pads. Use a crowbar.



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Remove the dust boot caps of the brake caliper guide pins. 8



Unscrew the brake caliper fastening. Use HEX No.H7. Use a ratchet wrench. 9



Treat the mounting seat of the brake caliper retaining spring. Use WD-40 spray. 10



Detach the brake caliper retaining spring. Use a crowbar. 11



Remove the brake caliper. 12



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#### Replacement: brake pads - Mini R50, R53. AUTODOC recommends:

- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, the piston can fall out from the brake cylinder, and brake fluid leakage and depressurization of the system may occur.

13 Remove the brake pads.

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#### Replacement: brake pads – Mini R50, R53. Tip from AUTODOC experts:

 Measure the brake disc thickness. Upon reaching the wear limit the part must be replaced.

Clean the brake caliper surface. Use a brake cleaner.



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#### **AUTODOC** recommends:

 Replacement: brake pads – Mini R50, R53. After applying the spray, wait a few minutes.





Clean the brake caliper bracket from dirt and dust. Use a wire brush. Use a brake cleaner.



## Replacement: brake pads - Mini R50, R53. Tip:

• After applying the spray, wait a few minutes.





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### Replacement: brake pads – Mini R50, R53. Tip from AUTODOC:

• Make sure the disc surface is clean before installing the pads.

18 Install new brake pads.

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#### Replacement: brake pads – Mini R50, R53. Professionals recommend:

• Make sure the pads are installed with linings facing the disc.

Install the brake caliper and fix it. Use HEX No.H7. Use a torque wrench. Tighten it to 30 Nm torque.



#### **AUTODOC** recommends:

 Mini R50, R53 – Press the brake pedal several times with the engine shut down until you feel the resistance built up.

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20 Install the brake caliper retaining spring.



Install the dust boot caps of the brake caliper guide pins.



Clean the brake disk surface. Use a brake cleaner.



#### **AUTODOC** recommends:

- Replacement: brake pads Mini R50, R53. After applying the spray, wait a few minutes.
- Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



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Install the wheel.



#### Replacement: brake pads – Mini R50, R53. AUTODOC experts recommend:

• To avoid injury, hold up the wheel when screwing in the fastening bolts.

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Screw in the wheel bolts. Use wheel impact socket #17.



Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 110 nm torque.



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Remove the jacks and chocks.



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#### **AUTODOC** recommends:

• Important! Replacement: brake pads – Mini R50, R53. Check the brake fluid level in the reservoir and top up if necessary.

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Tighten the brake fluid reservoir cap. Close the hood.

#### Replacement: brake pads - Mini R50, R53. AUTODOC recommends:

• Slow down smoothly for first 150-200 km after the brake pads replacement. Avoid unneccessary and sharp braking to a stop.



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